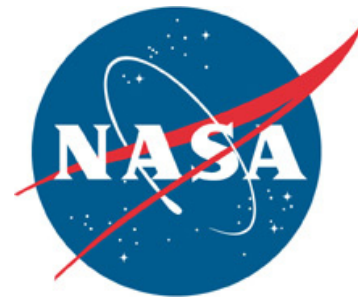


Spaceport News

John F. Kennedy Space Center - America's gateway to the universe

www.nasa.gov/centers/kennedy/news/snews/spnews_toc.html



INSIDE ...

Port eatery hosts telecon to ISS



Page 2

STS-127 mission a fruitful team effort



Page 3

Sisters serve space effort at Kennedy



Page 6

Heritage: Collins commands shuttle



Page 7

Bolden, Garver begin next mission

What's in a name? Well, in Charles F. Bolden Jr., there's "bold." And that's exactly what NASA is inheriting with its new administrator -- bold leadership.

The U.S. Senate confirmed Bolden as administrator and Lori Garver as deputy administrator July 15. They officially were sworn in at NASA Headquarters in Washington, on July 17.

During the confirmation hearing July 8, Bolden and Garver addressed the four main challenges facing the agency, saying they hope to turn those challenges into opportunities.

First, they want to build upon America's investment in the International Space Station, as well as safely and efficiently fly out the remaining space shuttle missions. Second, they want to accelerate the development of NASA's next-generation spacecraft. Third, Bolden and Garver want NASA to study Earth's environment from space. And fourth, they want NASA to inspire children to pursue careers in science, technology, engineering and math.

"I'm excited and energized about taking on these challenges," Bolden said.

Senator Bill Nelson, D-Fla., and Bolden are no strangers. In January 1986, they embarked on a 2.5 million mile journey together aboard space shuttle Columbia on the STS-61C mission. During the Senate confirmation hearing, Nel-



NASA/Bill Ingalls

Charles Bolden Jr. is sworn in as 12th administrator of the National Aeronautics and Space Administration at NASA Headquarters in Washington on July 17.

"These talented individuals will help put NASA on course to boldly push the boundaries of science, aeronautics and exploration in the 21st century and ensure the long-term vibrancy of America's space program."

President Barack Obama

son spoke highly of the duo, but said the president needs to reignite the imagination and excitement of NASA's future endeavors.

"If the president will give that bold strike, then that team (Bolden and Garver), right there, I believe, can implement it," Nelson said.

As the first African-American to lead the agency, Bolden holds a bachelor's in electrical science from the U.S. Naval Academy, and a master's in systems management from the University of Southern California. He became an astronaut in August 1981, and flew aboard four crucial



NASA/Bill Ingalls

Lori Garver, NASA's new deputy administrator, testifies July 8 at a confirmation hearing in Washington.

space shuttle missions, including pilot of STS-31, the mission that deployed NASA's Hubble Space Telescope. During his tenure at NASA, Bolden earned three Exceptional Service

See **BOLDEN**, Page 2

Restaurant hosts telecon to ISS at Port

The opportunity to talk to an astronaut usually draws large crowds. In fact, people come from around the world for the opportunity at the Kennedy Space Center Visitor Complex.

But how about getting the chance to talk to them while they're in space?

Center Director Bob Cabana came up with the idea to do it near Kennedy and organized the telephone conference.

Despite inclement weather, several hundred people gathered to talk to the astronauts aboard the International Space Station at Milliken's Reef restaurant at Port Canaveral, Fla., on July 10.

The phone call, led by then-NASA Acting Administrator Christopher Scolese and astronaut Peggy Whitson, gave workers and their families an opportunity to share a toast with astronauts Michael Barratt and Koichi Wakata and cosmonaut Gennady Padalka as they celebrated more than 100 days on the space station.



From left, astronaut Peggy Whitson, Alycia Araj, 11, Dr. Kuniaki Shiraki, executive director of the Japan Aerospace Exploration Agency, and then-NASA Acting Administrator Christopher Scolese, share in a telephone call from Milliken's Reef in Port Canaveral, Fla., to the International Space Station on July 10.

All the astronauts aboard the station, including cosmonaut Roman Romanenko, Robert Thirsk of the Canadian Space Agency and Frank De Winne of the European Space Agency answered questions.

Once Whitson made initial contact with the help of mission control at about

5 p.m., Scolese shared opening remarks with the astronauts.

"There's lots of people here with lots of questions," Scolese said. "I'm sure the first is, 'How's it like to spend 100 days in space.'"

Barratt replied, "For me it's been wonderful and flown by so fast."

Dr. Kuniaki Shiraki, the executive director of the Japan Aerospace Exploration Agency, or JAXA, didn't have a question, but rather gave congratulations to the ISS crew for its hard work and ability to get things done.

Wakata replied, "Thank you, there is so much beauti-

ful hardware launched from Kennedy Space Center. It's wonderful to work with this crew. I look forward to talking to you soon when I'm on the ground."

Alycia Araj, 11, a student at St. Mark's Episcopal Academy in Cocoa, Fla., and granddaughter of Milliken's Reef owner Rhoda Brennan, asked, "What's the hardest part about being in space?"

Barratt said, "Life up here is wonderful, but the hardest thing is being away from our families . . . I think all of us would agree."

Other questions included: Does the crew celebrate a happy hour in space similar to a Jimmy Buffet happy hour on Earth? Who, aboard the ISS served in the military? What was the most memorable part of serving on ISS? What language do the astronauts speak in space? How much power do the solar arrays create? What do astronauts do for fun? And can the crew see lightning during thunderstorms?

The overall goal of the event was to promote human spaceflight awareness.

From **BOLDEN**, Page 1

Medals, as well as an Outstanding Leadership Medal.

Adding to all of those honors, Bolden has brought space down to Earth as the host of the Kennedy Space Center Visitor Complex's Shuttle Launch Experience.

"I dream of a day when any American can launch into space and see the magnificence and grandeur of our home planet Earth," Bolden said.

Garver, whose first job in Washington was with space pioneer John Glenn, shares a similar vision. During the hearing, she reflected on the agency's current accomplishments.

"If we look at the space station right now, it is one of the pinnacle, cooperative efforts we have with the Russians, not to mention our other partners," Garver said. "I believe Charlie and I are interested in exploring those partnerships, exploring com-

mercial development that helps our own economy, and doing those things that are more relevant to the American taxpayer."

Garver holds bachelor's in political science and economics from Colorado College, and a master's in science, technology and public policy from George Washington University.

From 1998-2001, she served as the associate administrator of NASA's Office of Policy and Plans. She also was an executive director of the National Space Society, a non-profit organization that seeks to advance the day when humans will live and work in space.

Before their confirmation, the duo took the time to thank their predecessor, Chris Scolese, for his work as acting administrator since mid-January.

"He (Scolese) represents the very best of NASA's career civil servant work force. For his dedicated leadership and service, I am greatly appreciative," Bolden said.



NASA file/1986

Charles Bolden Jr. mans the pilot's seat on space shuttle Columbia's flight deck prior to re-entry Jan. 12, 1986, during the STS 61-C mission.

Processing 'firsts' set stage for STS-127 launch

By Linda Herridge
Spaceport News

Space shuttle Endeavour and its seven-member crew launched on the STS-127 mission on its sixth attempt, July 15, at 6:03 p.m., after five launch attempts were unsuccessful because of tanking leaks or weather issues. The long-awaited launch was preceded by a host of "firsts" by Ken-

nedy Space Center's launch processing team.

Endeavour's Flow Director Dana Hutcherson said, before the launch of the STS-125 mission to the Hubble Space Telescope, the processing team worked around the clock to get both launch pads ready for Atlantis and Endeavour.

"Essentially we were working two vehicle flows in parallel," Hutcherson said.

Workers processed and prepared Endeavour in the orbiter processing facility, or OPF, in 109 days and rolled the space shuttle out to Launch Pad 39B on April 17, for the STS-400 mission.

NASA Test Director Steve Payne said for dual pad processing, the resources were split. The ground processing team worked in the OPF, Vehicle Assembly Building and both launch pads with little or no break in activity.

Hutcherson said it was critical to have Endeavour on the pad and ready for launch in seven days in the event of a rescue mission. Once STS-125 launched, all resources were dedicated to getting STS-400 ready to launch. The team went as far as beginning launch countdown.

After the Hubble servicing mission was completed, Endeavour's STS-400 mission became STS-127 on May 21, and the space shuttle rolled around to Launch Pad 39A on May 31.

Payne said a lot of work was accomplished in a two-week timeframe for Endeavour's first launch attempt.

"We had to get smart and efficient with the use of the resources we had," Payne said.

The Japan Aerospace Exploration Agency's final Kibo segments were installed and tested in Endeavour's payload bay at the pad. Batteries, equipment and spare parts for the space station were added in the middeck.

Hutcherson said the OPF flow also was challenging, with a few "firsts" accomplished to get the midbody configured and ready for the payload. The payload required installation of more parallel active latches than normal. A dual



NASA/Kim Shiflett

In Firing Room 4 at Kennedy Space Center, Endeavour Flow Director Dana Hutcherson and STS-127 Shuttle Launch Director Pete Nickolenko take part in the tie-cutting ceremony for their inaugural launch as Shuttle Launch Director Mike Leinbach looks on.

latching design was implemented that uses one switch throw to control multiple latches and was a first for any payload upload. Hutcherson said an unprecedented amount of wiring work on the latches was completed to prepare the midbody for the payload.

The space shuttle's external tank was filled six times, tied with STS-1 in April 1981, and STS-35 in December 1990. It also had been quite a while since space shuttles sat on both launch pads at the same time.

Endeavour was ready to launch as scheduled on June 13, when the external tank's Ground Umbilical Carrier Plate, or GUCP, developed a leak during tanking. After a 96-hour scrub turnaround for a seal replacement, the vehicle was once again ready to launch. However, the leak proved far more difficult to resolve than had been expected, according to Payne.

The team went into high gear and studied the problem carefully, eventually detecting a misalignment in the GUCP that prevented the parts from fitting together correctly.

After nearly two weeks of hard work, the alignment problem was resolved.

Payne said a tanking test on July 1 verified that the repair had been successful and the team was once again ready to proceed with launch.

"It was a herculean effort," Payne said. "The entire processing team went the extra mile."

Endeavour was ready to launch on July 11, when severe thunderstorms rolled over Kennedy and Launch Pad 39A was struck by lightning. Launch was delayed before tanking while the team verified there had been no damage to the vehicle's systems.

A second attempt was made July 12, but it was scrubbed due to thunderstorms in the area. A third attempt was made on July 13, with a second scrub for weather.

"After a 48-hour delay, the team tried once again on July 15, and was rewarded with a spectacular launch," Payne said.

After a 16-day mission that includes five spacewalks, Endeavour is scheduled to land at Kennedy's Shuttle Landing Facility on July 31 at 10:52 a.m.



Photo courtesy of Scott Andrews/Canon

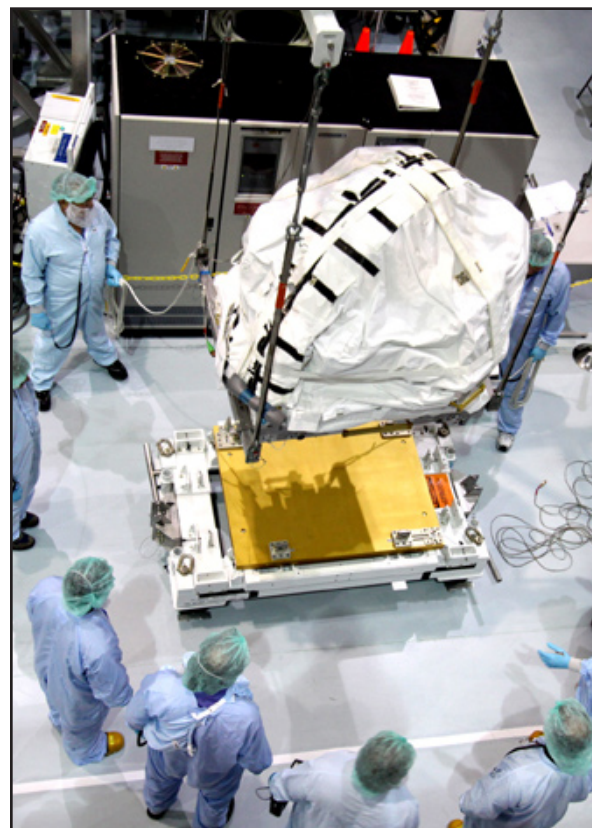
Propelled by columns of fire, space shuttle Endeavour hurtles into the cloud-washed sky July 15 at 6:03 p.m. from Kennedy Space Center's Launch Pad 39A on the STS-127 mission. This was the mission's sixth launch attempt. Endeavour will deliver the Exposed Facility and the Experiment Logistics Module-Exposed Section in the final of three flights dedicated to the assembly of the Japan Aerospace Exploration Agency's Kibo laboratory complex on the International Space Station.

Scenes Around Kennedy Space Center



NASA/Jim Grossmann

Kennedy Space Center Director Bob Cabana, standing fifth from right, and senior staff members wore "Embrace the Challenge -- Dare to Win" wristbands and gave a thumbs up to send get well wishes to the International Space Station Payload Processing Directorate's Deputy Director Tom Pentrack, who is fighting cancer. Kennedy workers can obtain a personalized wristband at distribution points to be announced.



NASA/Jack Pfaller

Technicians keep watch as a control moment gyroscope is lifted from its stand in the Space Station Processing Facility at Kennedy Space Center. The gyroscope is part of the STS-129 payload on space shuttle Atlantis, which will deliver to the International Space Station two spare gyroscopes, two nitrogen tank assemblies, two pump modules, an ammonia tank assembly and a spare latching end effector for the station's robotic arm. STS-129 is targeted to launch Nov. 12.



Reader-submitted photo

Some visitors to Kennedy Space Center's Headquarters Building take advantage of the shade.

Spaceport News wants your photos

Send photos of yourself and/or your co-workers in action for possible publication. Photos should include a short caption describing what's going on, with names and job titles, from left to right.

Send your photos to:

**KSC-Spaceport-News@
mail.nasa.gov**



NASA/Jack Pfaller

Workers attach the Ares I-X forward segment to the forward center segment atop the aft assembly in the Vehicle Assembly Building at Kennedy Space Center on July 17.



Photos by NASA/Kim Shiflett

VIPs, workers gather for Apollo 40th Anniversary

Apollo astronauts Edwin "Buzz" Aldrin, Walt Cunningham, Edgar Mitchell, Al Worden, Charlie Duke, Jerry Carr, Vance Brand and Bruce McCandless celebrated the 40th anniversary of the Apollo Program on July 16 at the Apollo Saturn V Center.

Personal stories, at times comical, were shared by the astronauts as they recalled their flight and training

experiences and took questions from moderator John Zarrella, a CNN anchor.

The ceremony concluded with the opening of the Apollo Treasures Gallery, a new exhibit at the Visitor Complex that houses rare Apollo artifacts. Guests at the event included Apollo veterans, current KSC employees, VIP guests and the general public.



It's 'all in the family' for 3 KSC sisters

By Linda Herridge
Spaceport News

Besides being sisters, Sharon Lane, Karon Buchner and Teresa Strobush have another important thing in common—they all work at Kennedy Space Center and have a combined 106 years on the job.

Lane, the oldest of the three, is an operations and processing specialist in the Requirements Verification and Data Retention Department for United Space Alliance. She works in Operations Support Building II and reviews and closes work authorization documents for ground support equipment modifications.

Lane worked for Federal Electric Corp. beginning in June 1971, and then moved to Computer Science Corp., Grumman, Lockheed and Lockheed Martin through contract transitions, before settling in with USA.

Lane said one of the challenges of her job is staying focused on the importance of safety first, meeting schedules, but never forgetting that lives and hardware depend on following set procedures.

"For 38 years I've been part of making history," Lane said. "I'm literally doing what others dream."

Lane said their father worked at Cape Kennedy, before it was Kennedy Space Center, as a firefighter.

"I was always fascinated by his job. As long as I can remember, I've always wanted to be here."

"We hardly see each other, but just knowing they are not far away is very comforting, and if we need each other, we're there," Lane said.

She described a time when her sister, Buchner, was attending a meeting in her building and they walked outside to see the shuttle landing.

"It struck me then that of all the time we have worked at the center, this was the first time we had ever been together to view any of the launch or landing activities," Lane said.

Buchner is a program analyst for NASA in the Launch Vehicle Processing Directorate. She is the Kennedy budget manager for Ares I-X.



NASA/Jim Grossmann

From left, sisters Sharon Lane, Teresa Strobush and Karon Buchner have a combined 106 years of service at Kennedy Space Center.

During her junior year in high school, she had the opportunity to join NASA as part of the Stay in School Program. After graduation, she was offered a full-time job.

I loved being part of the team making the space exploration dream come alive," Buchner said. "I worked full time and went to school at night to get a bachelor of science degree in computer information systems."

She said the best part of her job is seeing a project from development through implementation.

"One of the challenges is being able to find ways to mitigate the never-ending budget challenges," Buchner said.

The youngest of the three, Strobush works in the Business Office of the Information Technology and Communications Services Directorate.

She started working at Kennedy when she was 15 through a school

work program, with her parents' permission.

"I thought it was a great opportunity. I saw that my sisters were enjoying their work with the space program," Strobush said.

One of the best parts of her job is being able to help workers get the materials they need to do their jobs and meet their milestones.

"It's nice to have someone you love close to you all the time," Strobush added. "It's nice to have your big sisters here for support, when needed."

Strobush said she's looking forward to the U.S. going back to the moon.

"I was a little young when we did it the first time, so it would be great to be able to support the program to get us there again.

"Our mom was very proud of all of us working and making a difference in the space program," Strobush said.

"I hope the Constellation program will be a major leap in learning about our universe and I hope I get a chance to be a part of that contribution to science," Lane said.

Buchner hopes the government will continue to see the many benefits NASA has provided and will continue to fund the space exploration dream.

"With the transition from shuttle to Constellation, Kennedy has critical skills, processes and facilities to support more than just operations," Buchner said. "Kennedy can continue to provide support to development, fabrication and implementation of the new program."

Other family members at the center included Lane's husband, Skip, who retired after 38 years; their sister-in-law, Debbie Hamm, who worked as a buyer for the NASA Exchange for 18 years; Robbie Watts, who worked for USA; Jennifer (Buchner) Watts, Jason Buchner and Shawn Hamm.

Remembering Our Heritage

First female commander made 'giant leap' 10 years ago

By Kay Grinter
Reference Librarian

As NASA celebrates the 40th anniversary of the Apollo Program's "one small step for man" this week, NASA also remembers the anniversary of another equally important milestone: the launch of the first space shuttle mission commanded by a female astronaut.

In interviews with the media, the parents of that astronaut, Eileen Collins, described her as "a very ordinary person, a down-to-earth individual," and well she may have been seen by her friends and family.

Professionally though, as a military pilot and the first female pilot inducted into NASA's elite astronaut corps, Collins was in a unique "out-of-this-world" position to become NASA's first female space shuttle commander.

Female cosmonaut Valentina Tereshkova was in the forefront of the space race when she launched June 16, 1963, on the Soviet Union's Vostok 6, becoming the first woman ever to fly in space.

Collins was only seven years old when Tereshkova orbited Earth. On her "ordinary" path, she graduated from high school in Elmira, N.Y., in 1974, and took science, technology, engineering and mathematics courses in college: the STEM disciplines that NASA recognizes as providing the optimum background for future aerospace engineers and astronauts.

Her degrees started with an Associate of Science in mathematics and science from Corning Community College, followed by a Bachelor of Arts in mathematics and economics



Commander Eileen Collins consults a checklist while seated at the flight deck Commander's Station in space shuttle Columbia during the STS-93 mission July 29, 1999.

from Syracuse University in 1978. She graduated from the U.S. Air Force Undergraduate Pilot Training at Vance Air Force Base, Okla., in 1979, where she was a T-38 instructor pilot until 1982.

On June 18, 1983, Sally Ride earned the distinction of first female NASA astronaut to fly in space when she launched as a mission specialist with the crew of space shuttle mission STS-7. Her assignment was heralded as a step in the right direction by proponents of women's rights, but followed Tereshkova's flight by 20 years.

Meanwhile, from 1983 to 1985, Collins was a C-141 aircraft commander and instructor pilot at Travis Air Force Base, Calif. She spent the following year as a student with the U. S. Air Force Institute of Technology, earning a Master of Science in operations research from Stanford University in 1986. From 1986 to 1989, she was assigned to the U.S. Air Force Academy in Colorado as an assistant professor in mathematics and a T-41 instructor pilot. She earned a Master of Arts in space systems management from Webster University in 1989.

Not yet satisfied that she had met her full potential, she applied and was selected for the astronaut program in January 1990, while attending the U.S. Air Force Test Pilot School at Edwards Air Force Base, Calif., from which she also graduated.

As is standard NASA procedure, she became a full-fledged astronaut in July 1991, after her astronaut candidate training was completed.

Like all astronauts new to the corps, Collins had ground assignments before her first flight. Initially detailed to orbiter engineering

support, Collins also served on the astronaut support team responsible for orbiter prelaunch checkout, final launch configuration, crew ingress and egress, and landing and recovery. In mission control she served as a spacecraft communicator, known as a CAPCOM, and as the Astronaut Office's Spacecraft Systems Branch chief, the chief information officer, the Shuttle Branch chief, and the Astronaut Safety Branch chief.

Collins' first flight assignment was in the pilot's seat on shuttle mission STS-63 in 1995, and again, on STS-84 in 1997. Collins' next flight made "a giant leap" for womankind, serving as commander of space shuttle Columbia's STS-93 mission to deploy the Chandra X-ray Observatory. Launch on July 23, 1999, was 16 long years after Ride's momentous ride into the history books.

Following the tragic loss of space shuttle Columbia in 2003, Collins took command of NASA's Return to Flight mission, STS-114, in 2005, seeing through to completion the assignment she had been given before the accident.

Collins logged more than 872 hours in space before she retired from NASA in May 2006.

Did you know?

There are 23 female astronauts on active status in the corps today, and the 11 astronaut candidates recently chosen include three women. For a complete listing of their names and accomplishments, visit NASA's Web site at: <http://www11.jsc.nasa.gov/Bios/astrobio.html>.

NASA Employees of the Month: July



NASA/ Tom Farrar

Employees of the month for July are, from left: Matthew Smisor, Information Technology and Communications Services; Stephenie Hadaway, Safety and Mission Assurance Directorate; Timothy McKelvey, Engineering Directorate; Courtney Flugstad, Launch Vehicle Processing Directorate; James Pope, Constellation Project Office; David Olsen, Engineering Directorate; and Raymond Wheeler, Applied Technology Directorate (Employee of the Quarter). Not included are, Joseph Bell, Procurement Office; John Demko, Launch Services Program; Patricia Scheurer, External Relations (Employee of the Quarter); Timothy Bass, Chief Counsel; and John Womack, Center Operations.

NASA's Communication Policy

As a reminder, NASA's policy for interacting with media and the public can be found online at:
http://www.nasa.gov/audience/formedia/features/communication_policy.html
 POC: Allard Beutel, (321) 867-2468

Looking up and ahead . . .

July 31	Landing/KSC Shuttle Landing Facility: 10:52 a.m. EDT
Aug. 12	Launch/CCAFS: Atlas V, PAN; 4:55 p.m. EDT
Aug. 17	Launch/CCAFS: Delta II, GPS IIR-21; 6:35 a.m. EDT
Targeted for Aug. 18	Launch/KSC: Discovery, STS-128; 4:25 a.m. EDT
Planned for Sept. 3	Landing/KSC Shuttle Landing Facility: TBD
No earlier than Aug. 30	Launch/KSC: Ares I-X flight test; 7 a.m. EDT
September TBD	Launch/CCAFS: Atlas V, Commercial Payload; TBD
Sept. 15	Launch/CCAFS: Delta II, STSS Demo; TBD
Sept. 30	Launch/CCAFS: Delta IV, WGS SV-3; 7:38 p.m. EDT
No earlier than Nov. 1	Launch/CCAFS: WISE; TBD
Targeted for Nov. 12	Launch/KSC: Atlantis, STS-129; 4:22 p.m. EST
Planned for Nov. 23	Landing/KSC Shuttle Landing Facility: TBD
No earlier than Nov. 12	Launch/CCAFS: Delta IV, GOES-P; TBD
No earlier than Nov. 24	Launch/CCAFS: Atlas V, SDO; TBD
Late November/Early December	Launch/CCAFS: Delta IV, GPS IIF-1; TBD
No earlier than Jan. 23, 2010	Launch/VAFB: Taurus, Glory; TBD
Target Feb. 4, 2010	Launch/KSC: Endeavour, STS-130; 6:20 a.m. EST
Target March 18, 2010	Launch/KSC: Discovery, STS-131; 1:08 p.m. EDT
Target May 14, 2010	Launch/KSC: Atlantis, STS-132; 3:05 p.m. EDT
Target May 23, 2010	Launch/VAFB: Delta II, Aquarius / SAC-D Satellite; TBD
Target July 29, 2010	Launch/KSC: Endeavour, STS-133; 8:45 a.m. EDT
Target Sept. 16, 2010	Launch/KSC: Discovery, STS-134; 1 p.m. EDT
Targeted for Fall 2011	Launch/CCAFS: Atlas V, Mars Science Laboratory; TBD

WORD ON THE STREET

Astronaut Koichi Wakata has spent more than 100 days aboard the International Space Station . . . if you could, how long would you like to stay?



"Maybe a week just to enjoy the experience . . . I'd miss the ocean and water."

Megan Cochran,
with Brevard Workforce

"My summer vacation up there would be nice . . . you need time to explore."

Joy Antonucci,
with Abacus Technology Corp.



"As long as I possibly could . . . enjoying that food . . . it's a childhood dream."

Mario Busacca,
with NASA

"Maybe a couple of weeks or so . . . I'd get up on the scale every hour I was up there."

Kirt Bush,
with EG&G



"Maybe a week or so . . . I'd really miss the weather changes here."

Christine Coachman,
with Brevard Workforce



John F. Kennedy Space Center

Spaceport News

Spaceport News is an official publication of the Kennedy Space Center and is published on alternate Fridays by External Relations in the interest of KSC civil service and contractor employees.

Contributions are welcome and should be submitted **three weeks** before publication to the Media Services Branch, IMCS-440. E-mail submissions can be sent to **KSC-Spaceport-News@mail.nasa.gov**

Managing editor Candrea Thomas
 Editor Frank Ochoa-Gonzales
 Copy editor Rebecca Sprague

Editorial support provided by Abacus Technology Corp. Writers Group.
 NASA at KSC is on the Internet at www.nasa.gov/kennedy
 USGPO: 733-049/600142